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Declarations under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,

- CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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(54) Title: ANCHOR INSTALLATION SYSTEM

(57) Abstract: A system and method for installing a pile anchor (75) using an anchor installation system (100). The anchor installation system comprising an elongated hollow anchor element (75) that is releasably attached to an installation element or installer (50). The installer can be used repeatedly for multiple installations.



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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : E02D 15/08, 5/52			
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NONE			
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NONE			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where	appropriate, of the relevant pass	ages Relevant to claim No.
X	US 3,496,900 A (MOTT et al.) 24 February 1970 (24.02.1970), Figs. 1-4.		1-40
Α	US 6,309,269 B (FULTON et al.) 30 October 2001 (30.10.2001), Figs. 4-6:		
	00 0,000,200 2 (1 021 01 ct al.) 30 0ctbbel 200	1-40	
Α	US 4,575,282 A (PARDUE, SR. et al.) 11 March 1986 (11.03.1986), Figs. 1, 2, and 7-		and 7- 1-40
	18.		
A	US 5,704,732 A (HORTON, III) 06 January 1998 (06.01.1998), Figs. 1 and 3-11.		1-40
P	US 6,719,496 B (VON EBERSTEIN) 13 April 2004 (13.04:2004), Figs. 1, 2, 5, 6, and		and 1-40
	12-16.		
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